INTERNA	NAL	. SEARCH	REPORT
		•	

A. CLASSIFICATION OF SUBJECT MATTER IPC 7 B60N2/42 B60N2/427

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols) IPC 7-B60N

Documentation searched other than minimum documentation to the extent that such documents are included. In the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
χ	US 6 227 563 B1 (TALISMAN RUEBEN) 8 May 2001 (2001-05-08)	1
Υ .	column 3, line 40 -column 7, line 20; figures 1-8	2–6
Y	US 5 947 543 A (HUBBARD LEO JAMES) 7 September 1999 (1999-09-07)	2-4
A	abstract; figures 1-10	1
Υ	US 3 582 133 A (DELAVENNE HUBERT Y) 1 June 1971 (1971-06-01)	5,6
A	abstract; figures 1-6	1
X	US 5 314 206 A (VOLLMER ELMAR) 24 May 1994 (1994-05-24) column 3, line 34 -column 4, line 33; figures 1-3	1,5
	-/	

Further documents are listed in the continuation of box C.	χ Patent family members are listed in annex.
Special categories of cited documents: "A" document defining the general state of the art which is not considered to be of particular relevance "E" earlier document but published on or after the international filing date "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "O" document referring to an oral disclosure, use, exhibition or other means "P" document published prior to the international filing date but later than the priority date claimed	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art. "&" document member of the same patent family
Date of the actual completion of the international search 9 October 2003	Date of mailing of the International search report 17/10/2003
Name and mailing address of the ISA European Patent Office, P.B. 5818 Patentlaan 2 NL – 2280 HV Rijswijk Tel. (+31–70) 340–2040, Tx. 31 651 epo nl, Fax: (+31–70) 340–3016	Authorized officer Gatti, C



Internal Application No
PCT/EP 03/06615

	,	PCT/EP 03/06615
C.(Continua	ation) DOCUMENTS CONSIDERED TO BE RELEVANT	
Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to daim No.
X	US 2001/011830 A1 (NILSSON KENT) 9 August 2001 (2001-08-09) cited in the application	1,3
4	abstract; figures 1-19	4
X	DE 42 33 155 A (MUELLER FRANZ DIPL ING FH) 14 April 1994 (1994-04-14) abstract; figures 1-5	. 1
K	US 5 022 707 A (MEADE ALBERT J ET AL) 11 June 1991 (1991-06-11) abstract; figures 25,27,28,30	. 1
A	US 5 746 467 A (JESADANONT MONGKOL) 5 May 1998 (1998-05-05) abstract; figures 1-5	1,5,6
A	GB 1 271 108 A (KLIPPAN) 19 April 1972 (1972-04-19) the whole document	1,6
Α	GB 1 391 644 A (HERZER K HERTZER KURT) 23 Apr11 1975 (1975-04-23)	
	,	·
	·	

Patent document cited in search report		Publication date		Patent family member(s)	Publication date
US 6227563	B1	08-05-2001	NONE		
US 5947543	Α	07-09-1999	US	6092853 A	25-07-2000
US 3582133	Α	01-06-1971	FR	1543275 A	25-10-1968
			DE	1780008 A1	02-03-1972
			GB	1228657 A	15-04-1971
			FR	93128 E	14-02-1969
			FR	94274 E	25-07-1969
US 5314206	Α	24-05-1994	DE	4032386 A1	16-04-1992
			DE	59103930 D1	26-01-1995
			MO	9206866 A1	30-04-1992
			EP	0551279 A1	21-07-1993
			ES	2068597 T3	16-04-1995
			JP JP	2894833 B2 6500282 T	24-05-1999 13-01-1994
			UF 		13-01-1994
US 2001011830	A1	09-08-2001	AU	6428998 A	29-09-1998
			EP	0966365 A1	29-12-1999
			WO	9840238 A1	17-09-1998
			US	6435591 B1	20-08-2002
DE 4233155	Α	14-04-1994	DE	4233155 A1	14-04-1994
US 5022707	Α	11-06-1991	CA	1299987 C	05-05-1992
			DE	3853149 D1	30-03-1995
			DE	3853149 T2	19-10-1995
			EP	0323758 A2	12-07-1989
•			JP	2169343 A	29-06-1990
			US	5449218 A	12-09-1995
			KR	125572 B1	01-07-1998
US 5746467	Α	05-05-1998	US	5810417 A	22-09-1998
•			DE	69616229 D1	29-11-2001
			EP	0769414 A2	23-04-1997
			JP	9118164 ⁻ A	06-05-1997
GB 1271108	A	19-04-1972	DE	1755660 A1	02-03-1972
			FR	2010236 A5	13-02-1970
			NL 	6907050 A	09-12-1969
GB 1391644	A	23-04-1975	NONE		